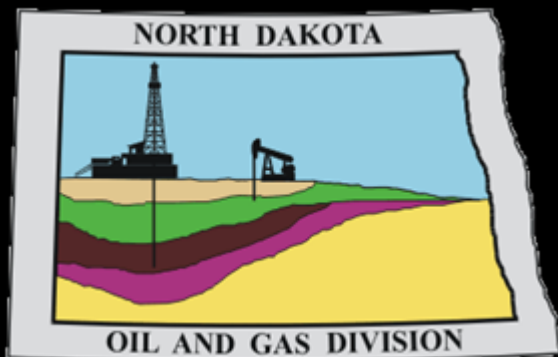


North Dakota Department of Mineral Resources



<http://www.oilgas.nd.gov>



<http://www.state.nd.us/ndgs>

600 East Boulevard Ave. - Dept 405

Bismarck, ND 58505-0840

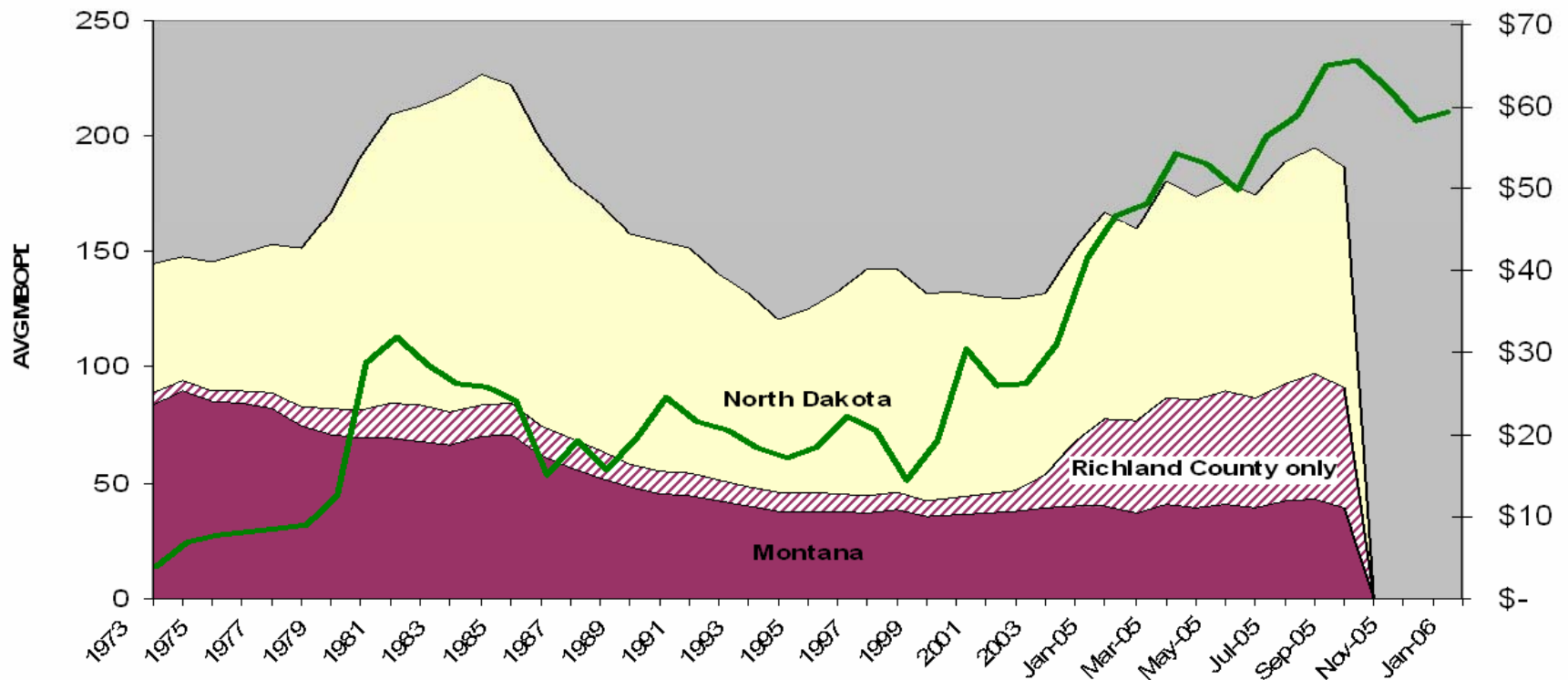
(701) 328-8000 (701) 328-8020

Background



Williston Production Summary

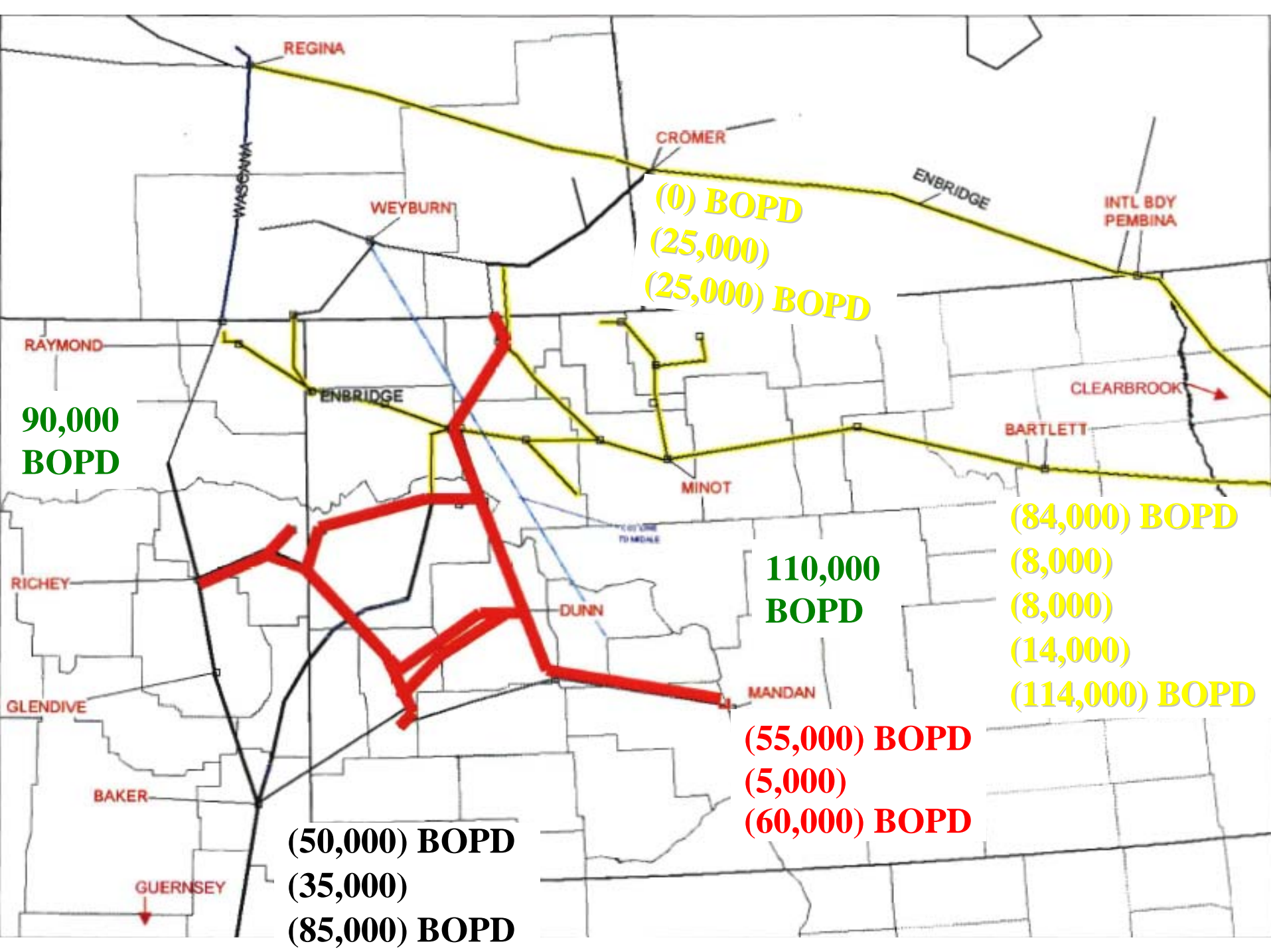
Oil Price



Source: Montana and North Dakota Oil Production: I.H.S. Energy

Oil Price History: Energy Information Administration - January 2006 Monthly Energy Review - WTI Spot 5

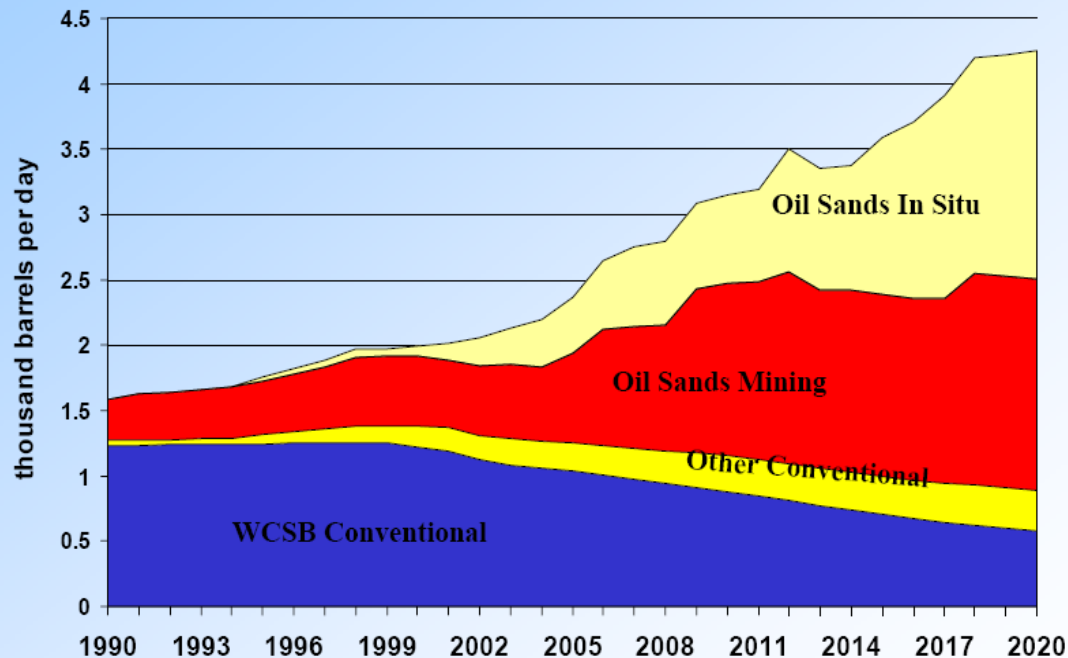




Western Canadian Sour



Projected Canadian Oil Supply



Sources Conventional Production - CAPP 2005-2015 forecast
Oil Sands Bitumen Production and trend extrapolation beyond 2015 - ADOE

Western Canada's crude and condensate production is set to rise from 2.2mn b/d last year to 2.6mn b/d in 2007 and 3.6mn b/d by 2015.

ARGUS NEWSFLASH - 1.24.06

New pipelines reshape North American pricing

Western Canadian Sour (WCS) is 19-22°API with 2.8-3.2pc sulphur.



Technical Parameters for Upgrading Alberta Bitumens

	Carbon Rejection: Delayed Coking	Hydrogen Addition: Genoil Heavy Oil Upgrader (GHU™)
Bitumen Input		
API	7.80°	8.50°
Sulphur	5.10%	5.14%
Nitrogen	0.45%	0.29%
Output		
API	28.70°	24.80°
Sulfur	3.20%	0.24%
Nitrogen	Not available	0.14%
Crude Barrels as % of Bitumen Input		
Light and Medium Crudes	82.0%	108.0%
Heavy Crudes	0.0%	17.5%
Coke	18.0%	0.0%

Source:

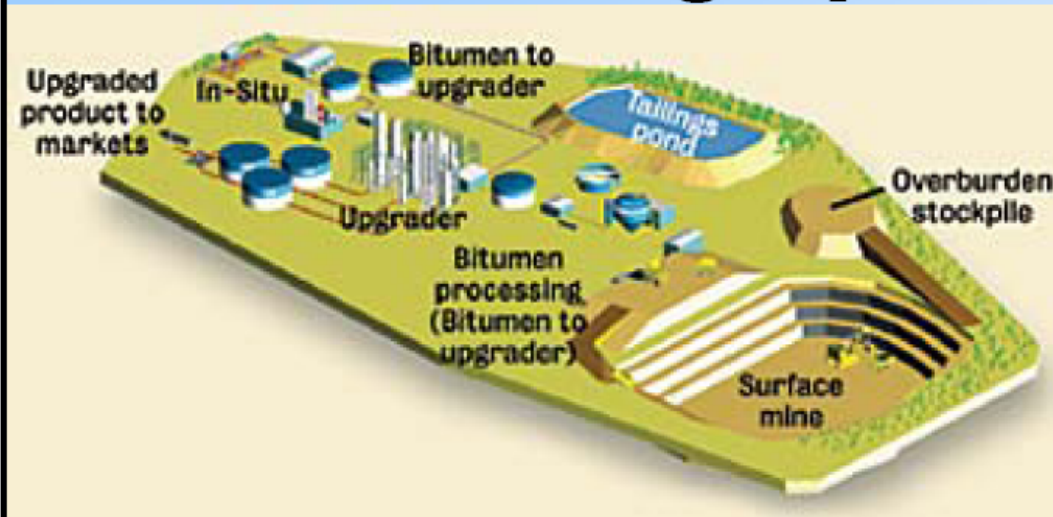
Delayed Coking: Murray R. Gray, "New technique defines the limits of heavy oils, bitumens," *Oil & Gas Journal*, Jan. 7, 2002

Genoil Heavy Oil Upgrader: Genoil Web site (www.genoil.net) and Genoil internal estimates

Western Canadian Sour



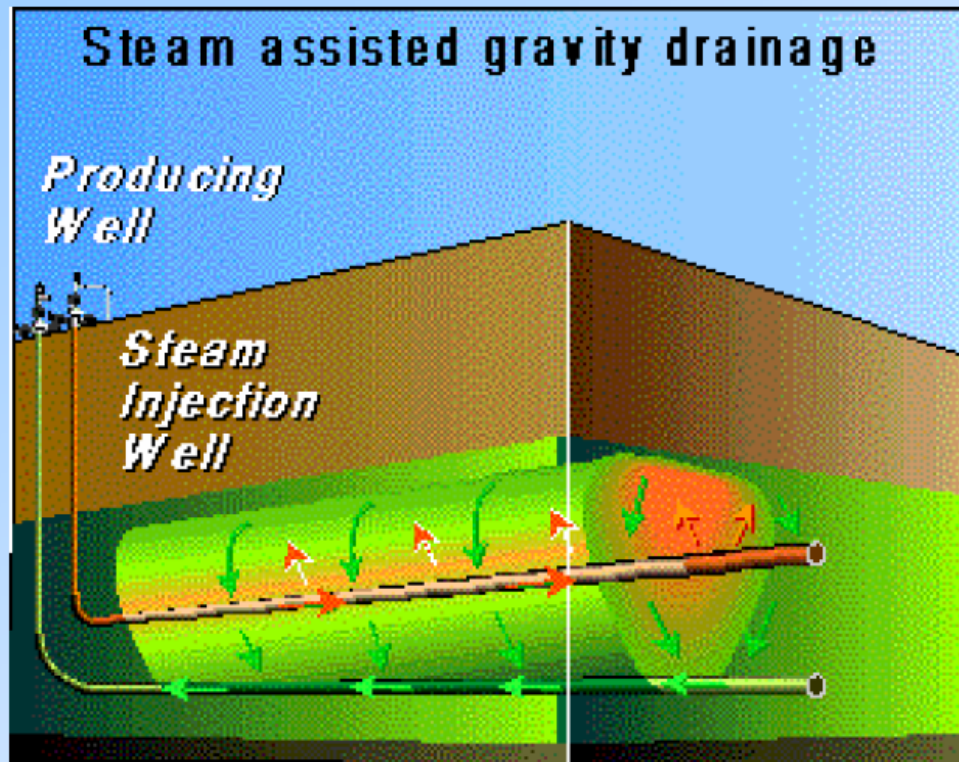
Mining Operations



Western Canadian Sour



In Situ Operations



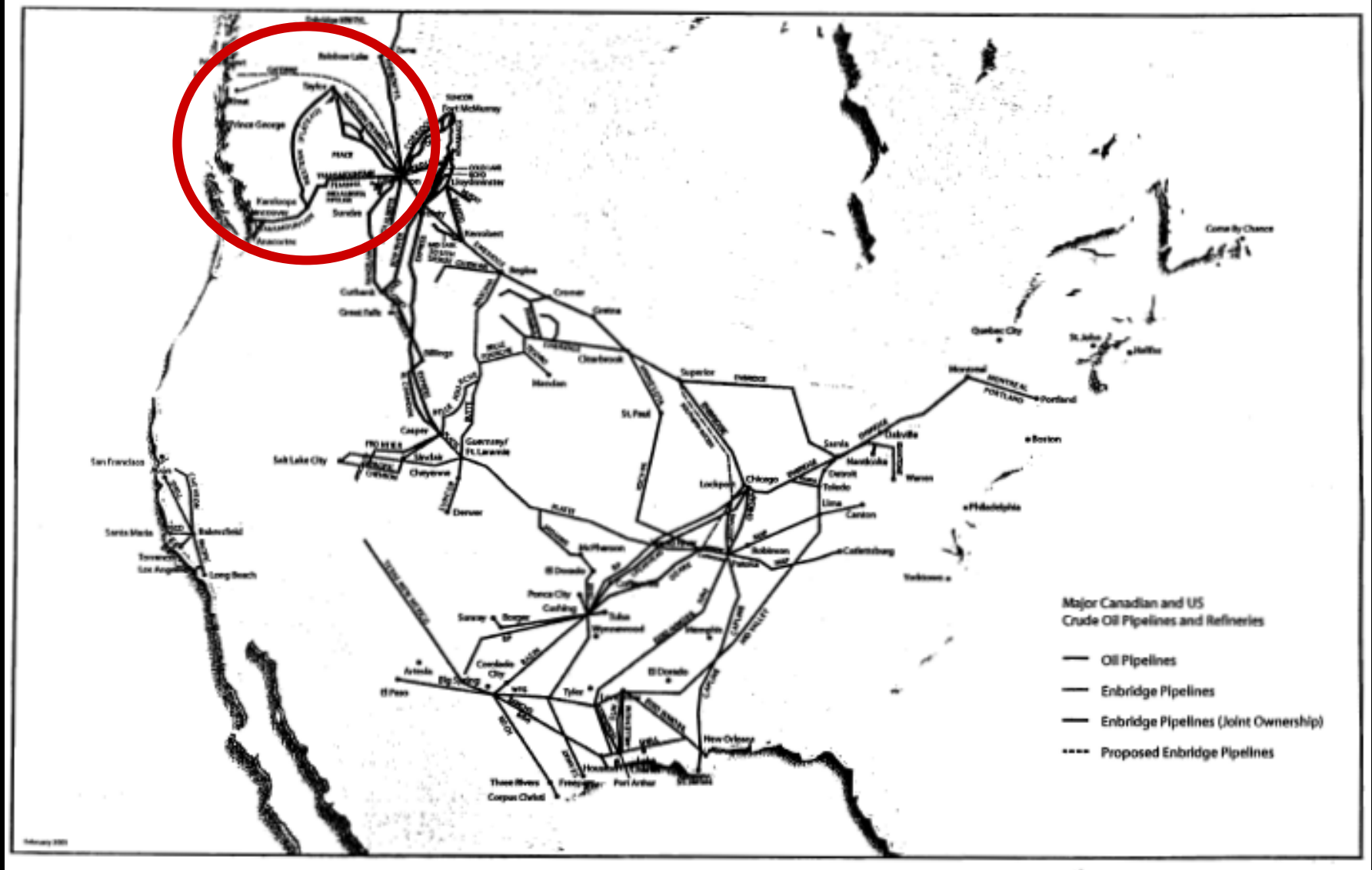
- 80% of current reserves
- Multiple Technologies
 - Cold pumping
 - Cyclic steam stimulation
 - SAGD
 - Vapex
 - THAI

SAGD Operations Example

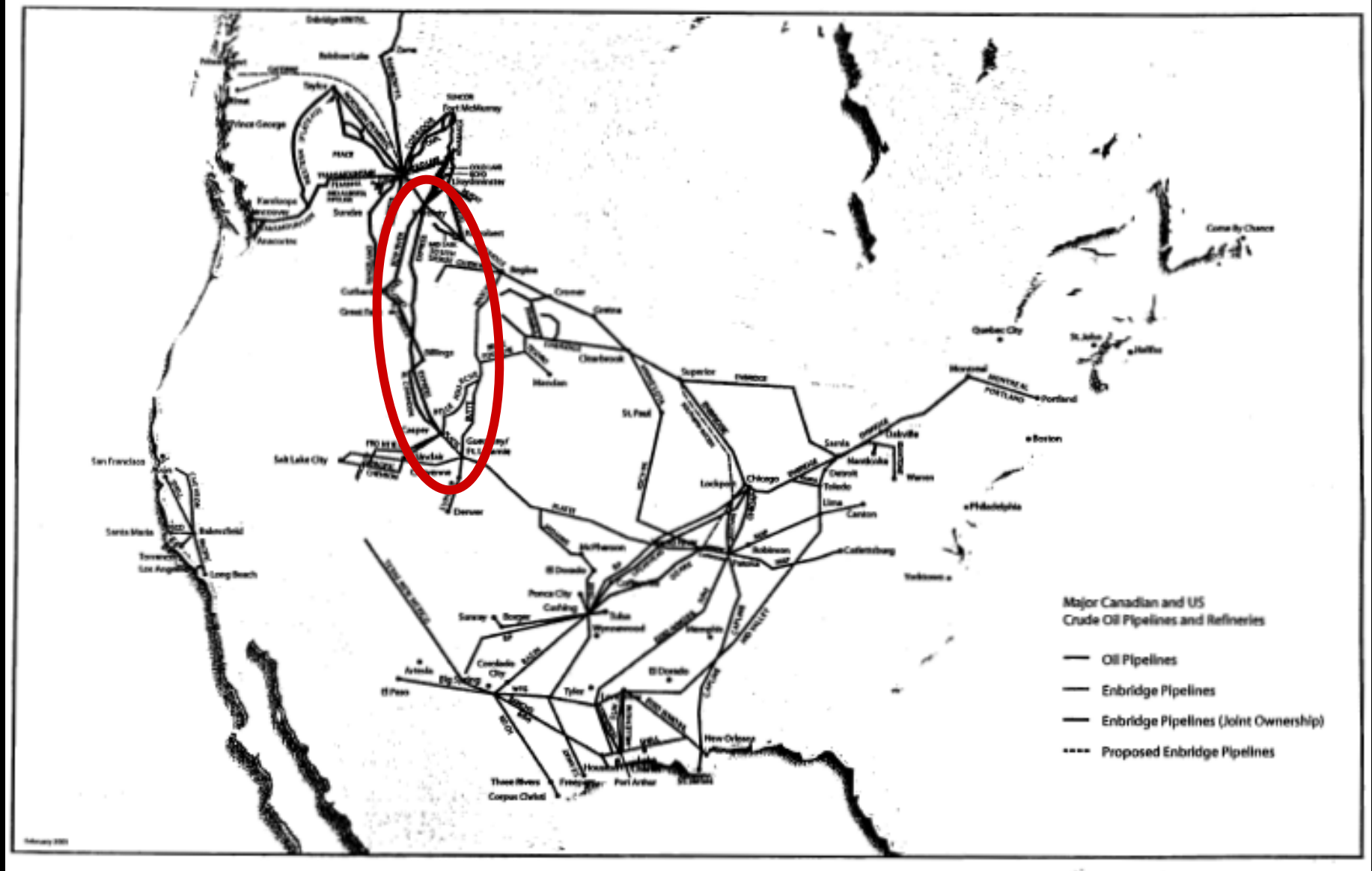
ARGUS NEWSFLASH - 1.24.06

- **In winter, asphalt demand for road paving evaporates and Canadian producers must steeply discount their heavy crude, which has high asphalt yields. Access to markets outside the region is minimal, but new pipelines could change that, supporting Canadian crude prices and - at the same time - linking prices in the Gulf coast and Pacific markets.**
- **The latest pipeline projects aim to move surplus WCS to the 6.5mn b/d refining hub on the US Gulf coast and to Pacific coast markets including California.**
- **Refiners may opt to shift from Mexican or Venezuelan crude to WCS, particularly in the winter when WCS is at steep discounts to US Gulf rivals.**
- **Demand for heavy Canadian crude will be boosted by coker projects**

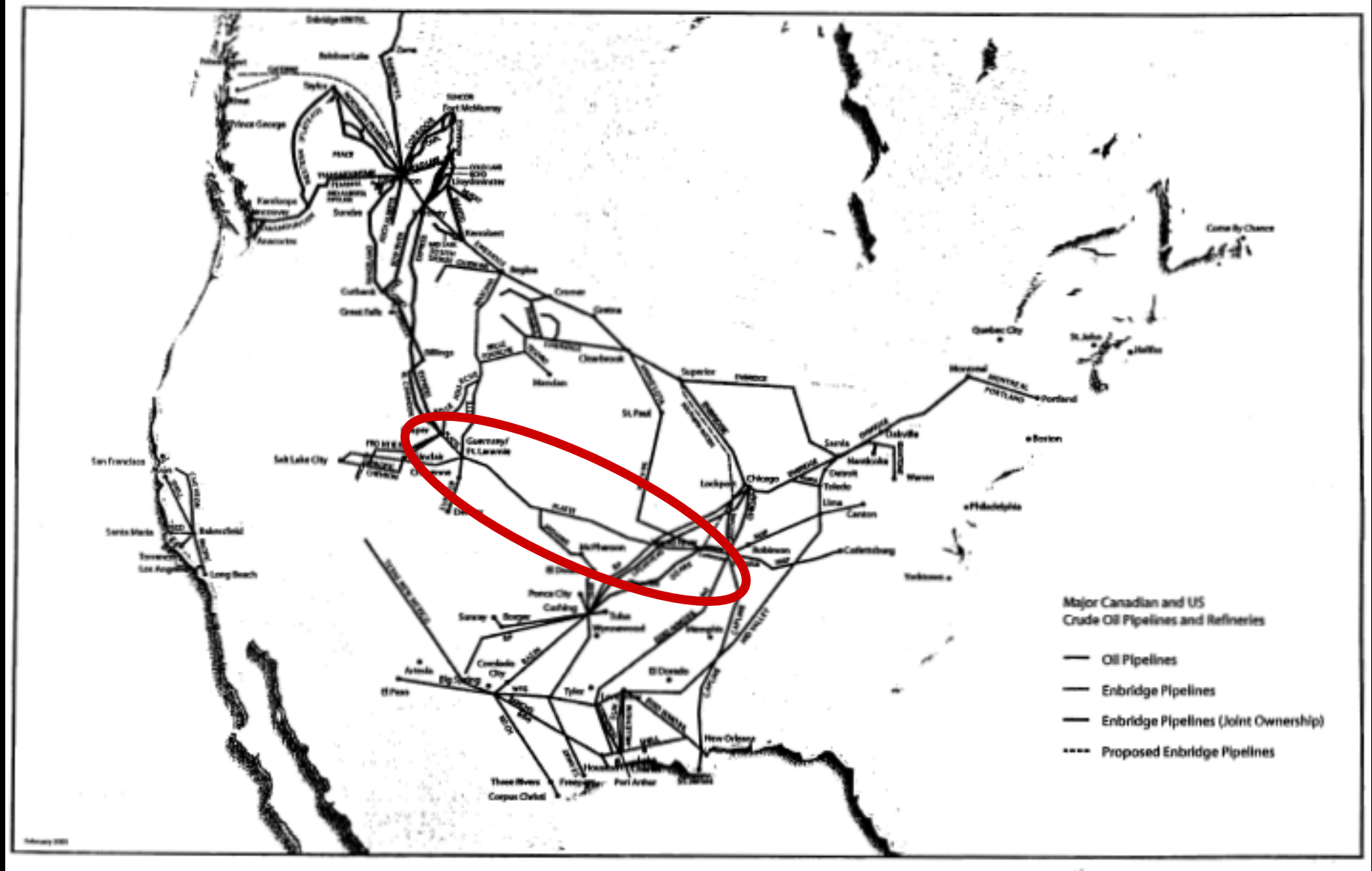
ExxonMobil about 65,000 b/d of heavy Canadian crude to the Texas coast
ConocoPhillips a 15,000 b/d coker in 2008 at its refinery in Borger, Texas
Tesoro? in Seattle
Koch & Marathon 335,000 b/d capacity in the Minneapolis area by 2008



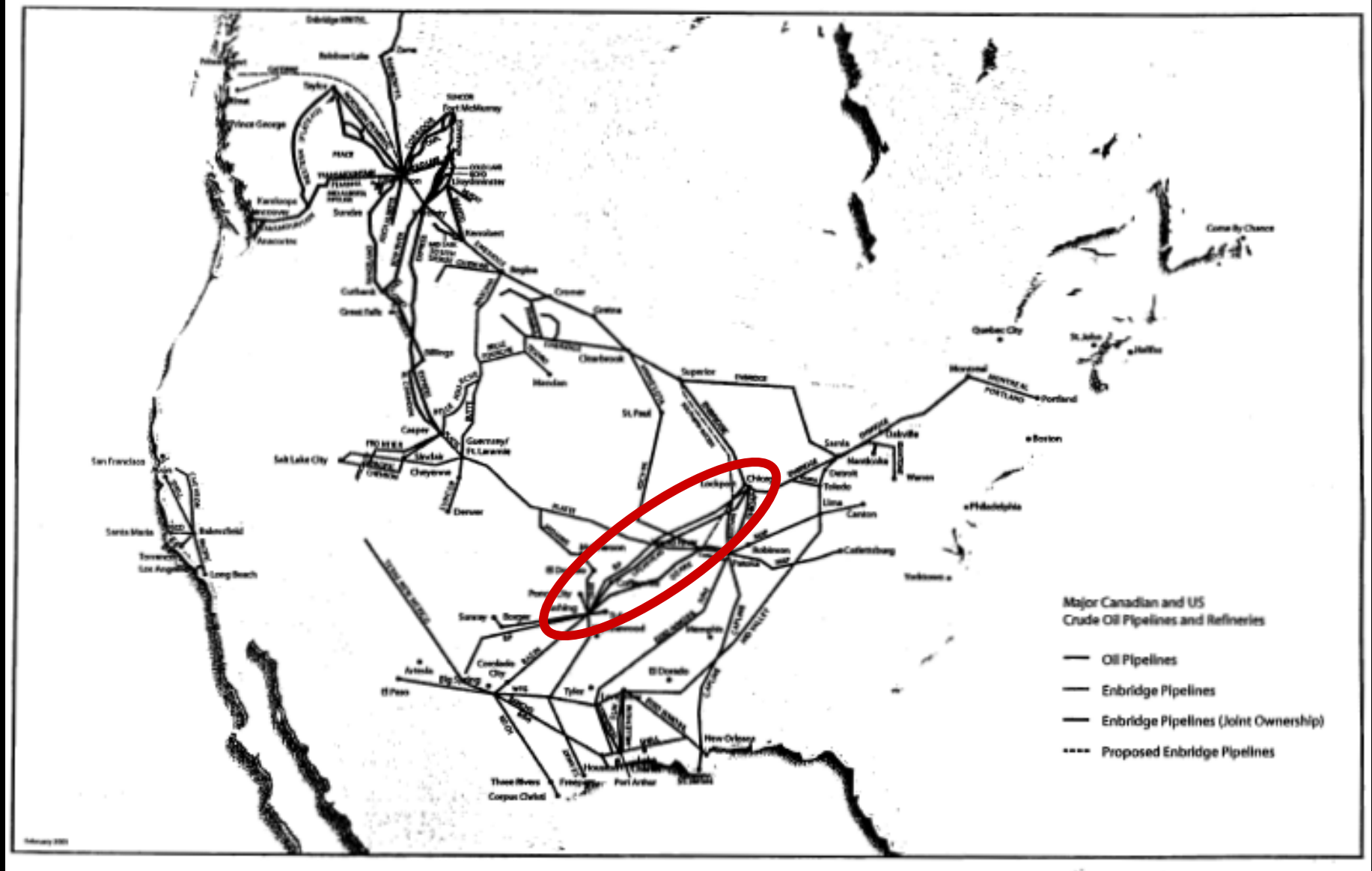
On the Pacific coast Kinder Morgan is expanding its Trans Mountain line from Edmonton to Vancouver and could add 625,000 b/d in Pacific-bound capacity by 2010. Enbridge has already signed up shipping commitments for its planned 400,000 b/d line to the Pacific port of Kitimat.



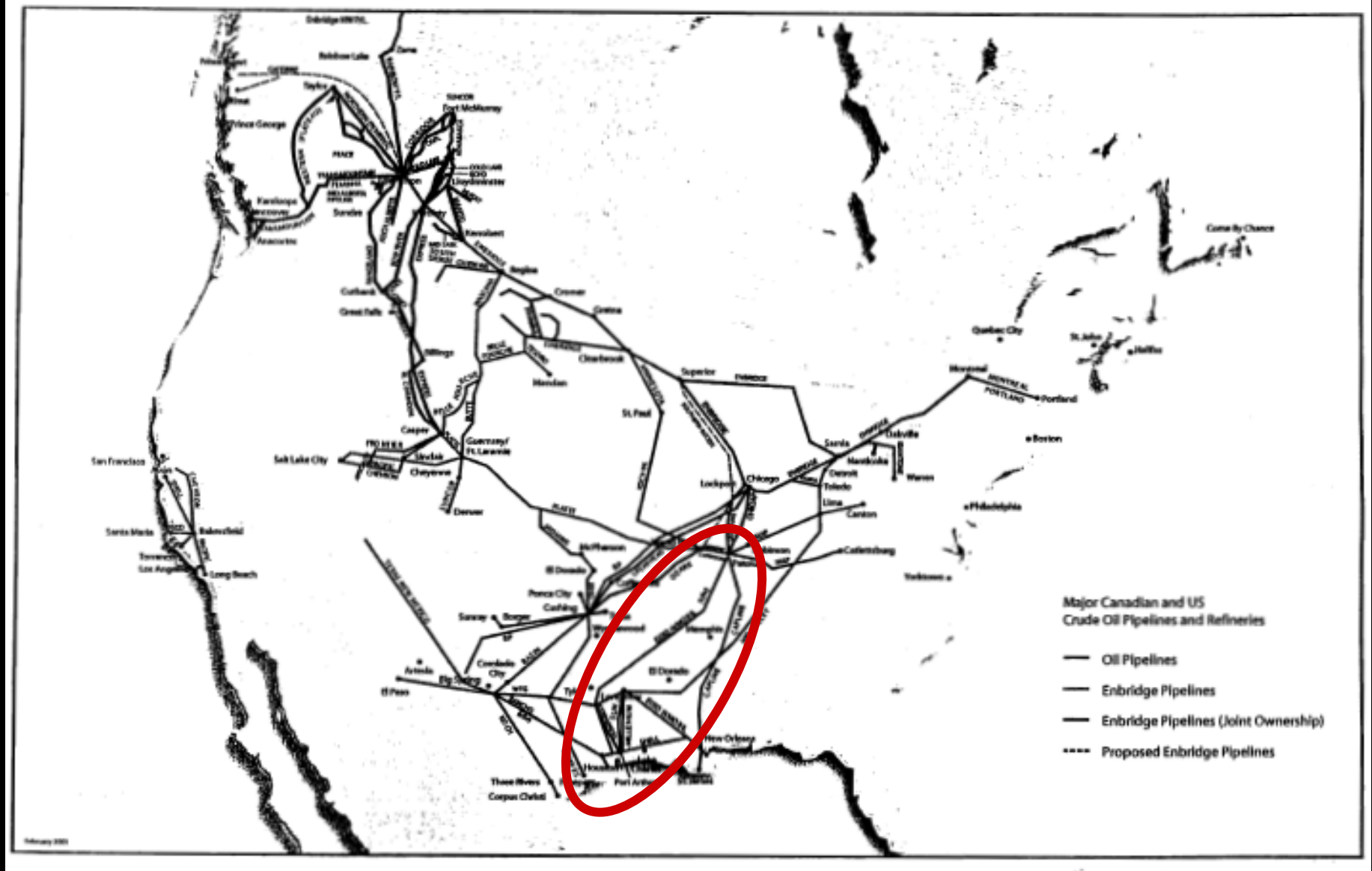
WCS is breaking into the US market. It can reach the Rockies through the Bow River South pipeline and a 108,000 b/d expansion of the Express pipeline to 280,000 b/d in April last year.



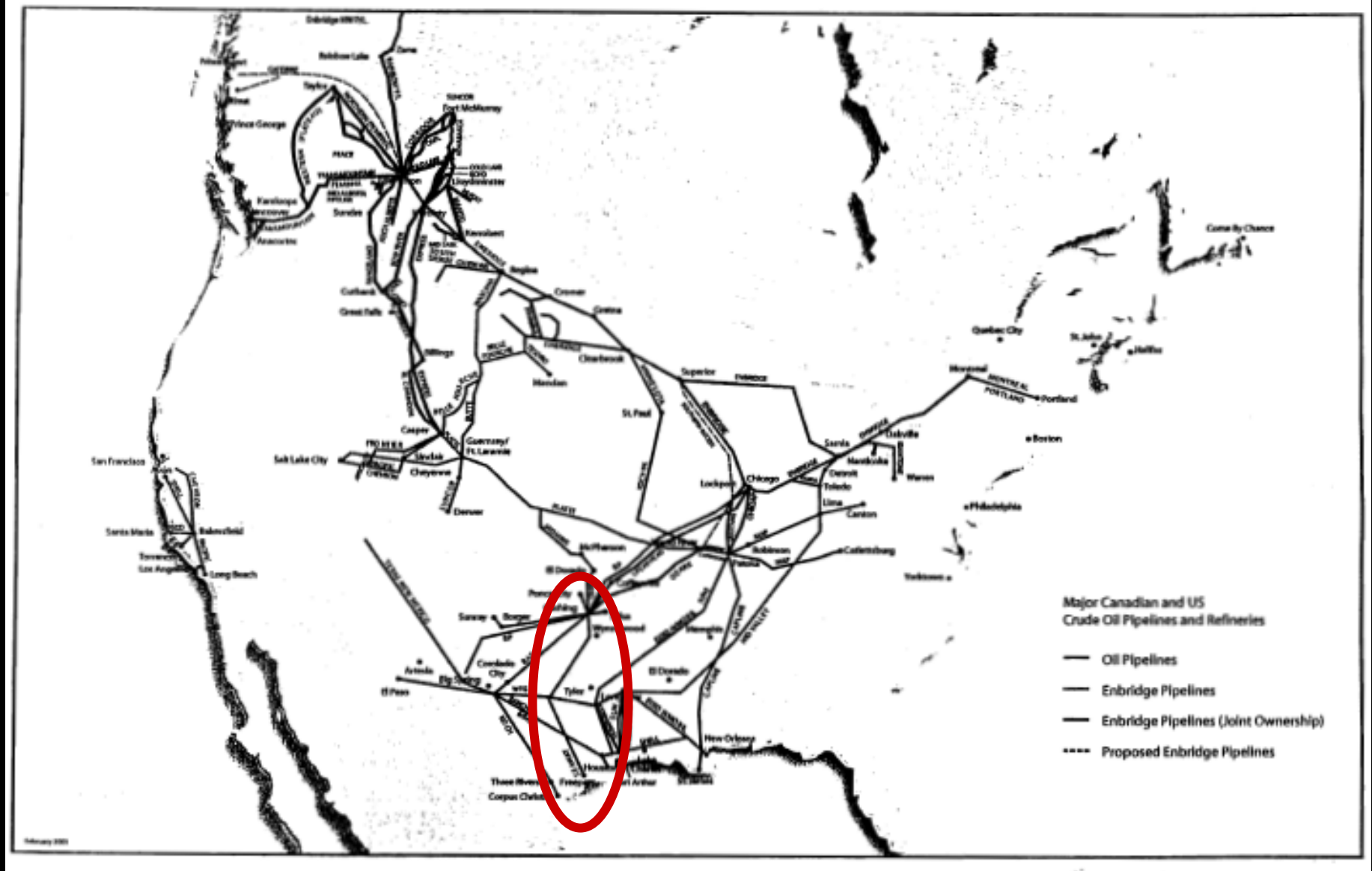
WCS is linked by the Express-Platte pipeline to Wood River, Illinois, in the US mid-continent, where it will compete with US pipeline sour crude.



Canada's Enbridge will start up the 125,000 b/d Spearhead line in March. The old BP line has been reversed to carry mostly WCS from Chicago to Cushing, Oklahoma, the hub for WTI crude pricing and storage.



ExxonMobil will take about 65,000 b/d of heavy Canadian crude to the Texas coast on a reversed line from Patoka, Illinois, with deliveries starting by April.



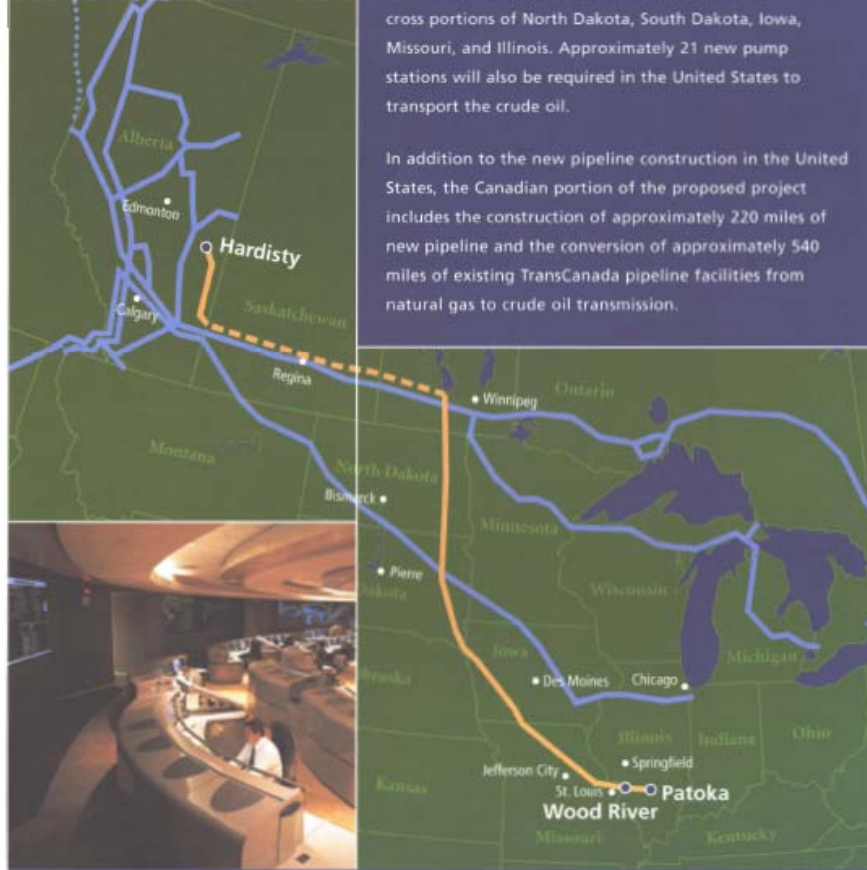
This shift could lead the operator of a much larger pipeline, such as the 350,000 b/d Seaway, to reverse its direction to bring Canadian crude south to the US Gulf coast.

THE PROPOSED TRANSCANADA KEYSTONE PIPELINE PROJECT

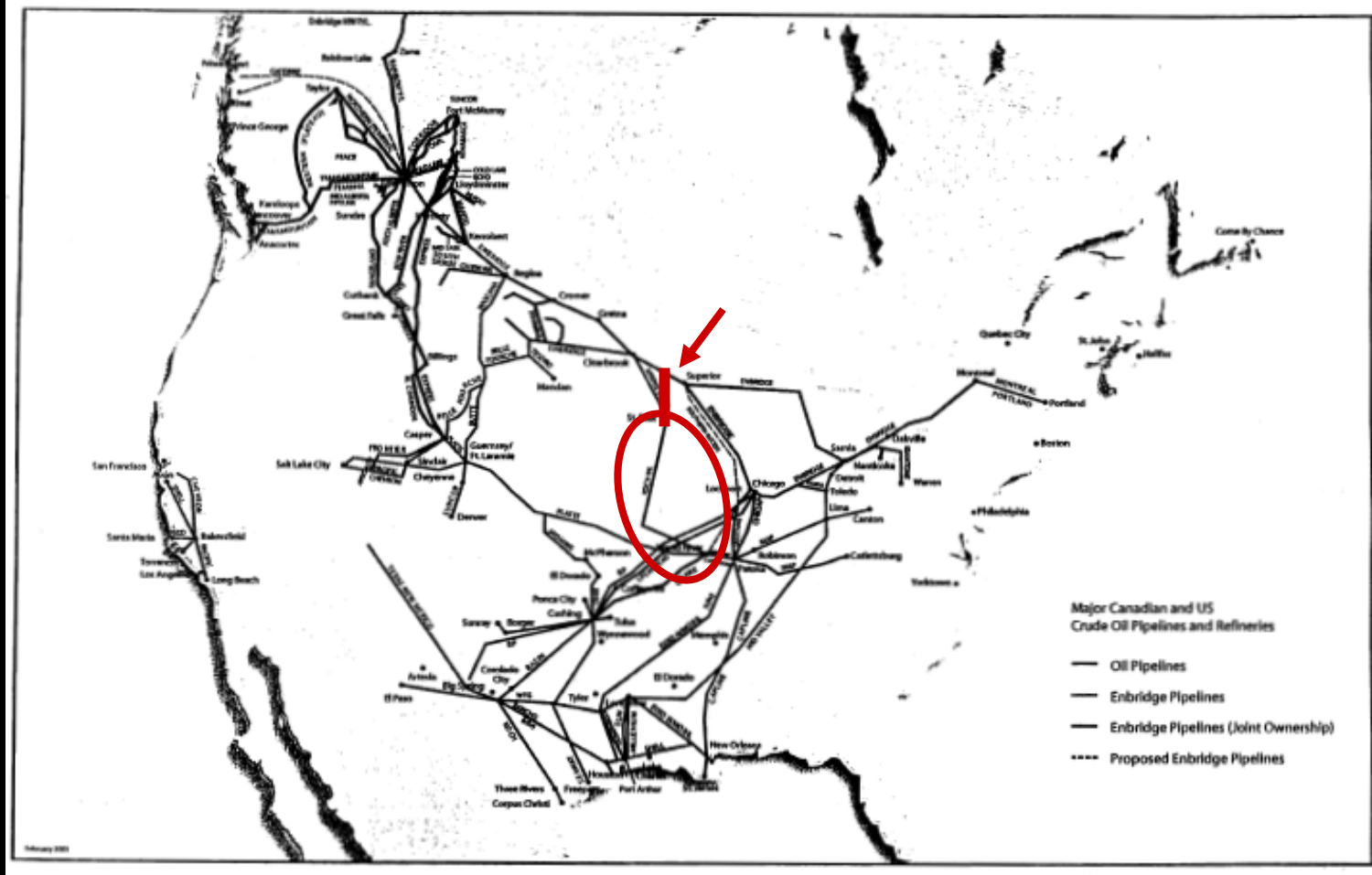


Our company, TransCanada, is proposing to transport approximately 435,000 barrels per day of crude oil from an oil-supply hub near Hardisty, Alberta to Wood River and Patoka, Illinois through an approximate 1,760 mile pipeline system. Nearly 1,000 miles of new pipeline will cross portions of North Dakota, South Dakota, Iowa, Missouri, and Illinois. Approximately 21 new pump stations will also be required in the United States to transport the crude oil.

In addition to the new pipeline construction in the United States, the Canadian portion of the proposed project includes the construction of approximately 220 miles of new pipeline and the conversion of approximately 540 miles of existing TransCanada pipeline facilities from natural gas to crude oil transmission.



Keystone Pipe Line a venture of Trans Canada plans to build a \$400mn pipeline to take 300,000-450,000 b/d of crude from Enbridge's main Canadian crude trunk line system south to Patoka, Illinois, which is the North American hub for crude oil pipelines. Second phase hopes to increase capacity to 600,000 b/d.



Minnesota Pipe Line, a joint venture of US-based Koch and Marathon, plans to build a \$300mn pipeline called MinnCan to take 300,000 b/d of crude from Enbridge's main Canadian crude trunk line system south to Minneapolis by 2008. MinnCan would feed Koch and Marathon's 335,000 b/d of refining capacity in the area. Minnesota has pipeline connections south to Wood River, Illinois, which is the terminus of the 282,000 b/d Express-Platte pipeline system from the Canadian sour crude hub of Hardisty.

How this affects North Dakota

Governor Hoeven has held a series of meetings with refiners, pipeline transporters, producers, purchasers-shippers, and truck transporters.

Short term (6 months)

Refinery margins have been squeezed by high Nymex crude prices (Iran & Nigeria fear) at a time of soft gasoline, distillate, and asphalt sales (warm winter & slow driving season).

We do not have enough refined product pipeline capacity out of ND. Even if our refinery had all of the ND gasoline and diesel market they would have to ship 1/3 their capacity out of state.

WCS crude has flooded the Guernsey market (Billings, Cheyenne, Denver) and driven crude prices down \$10-15 below Clearbrook (Minnesota) and \$15-30 below Nymex.

A fire and planned turn around at Sunoco's Denver refinery has cut Guernsey capacity for ND crude 10,000+ BOPD.

How this affects North Dakota

Near term (1-2 years)

Pipeline expansions could add capacity to Clearbrook and east.

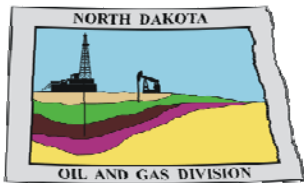
The transportation situation is likely to return every winter until more refinery capacity is built (ND, MN, or MT).

Long term (3-10 years)

WCS production is expected to increase more than 1 million BOPD

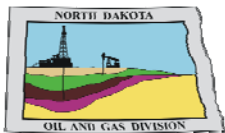
400-600,000 BOPD could go to the west coast and be shipped to China.

600,000 – 1,200,000 BOPD will come south through our current pipeline system and 2 new lines in eastern ND (Keystone) and western MN (MinnCan) to refineries that now utilize ND and MT crude, connecting to pipelines that access IL, MO, OK, and TX refineries.



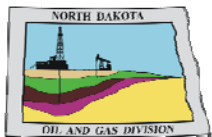
North Dakota Daily Oil Produced and Price



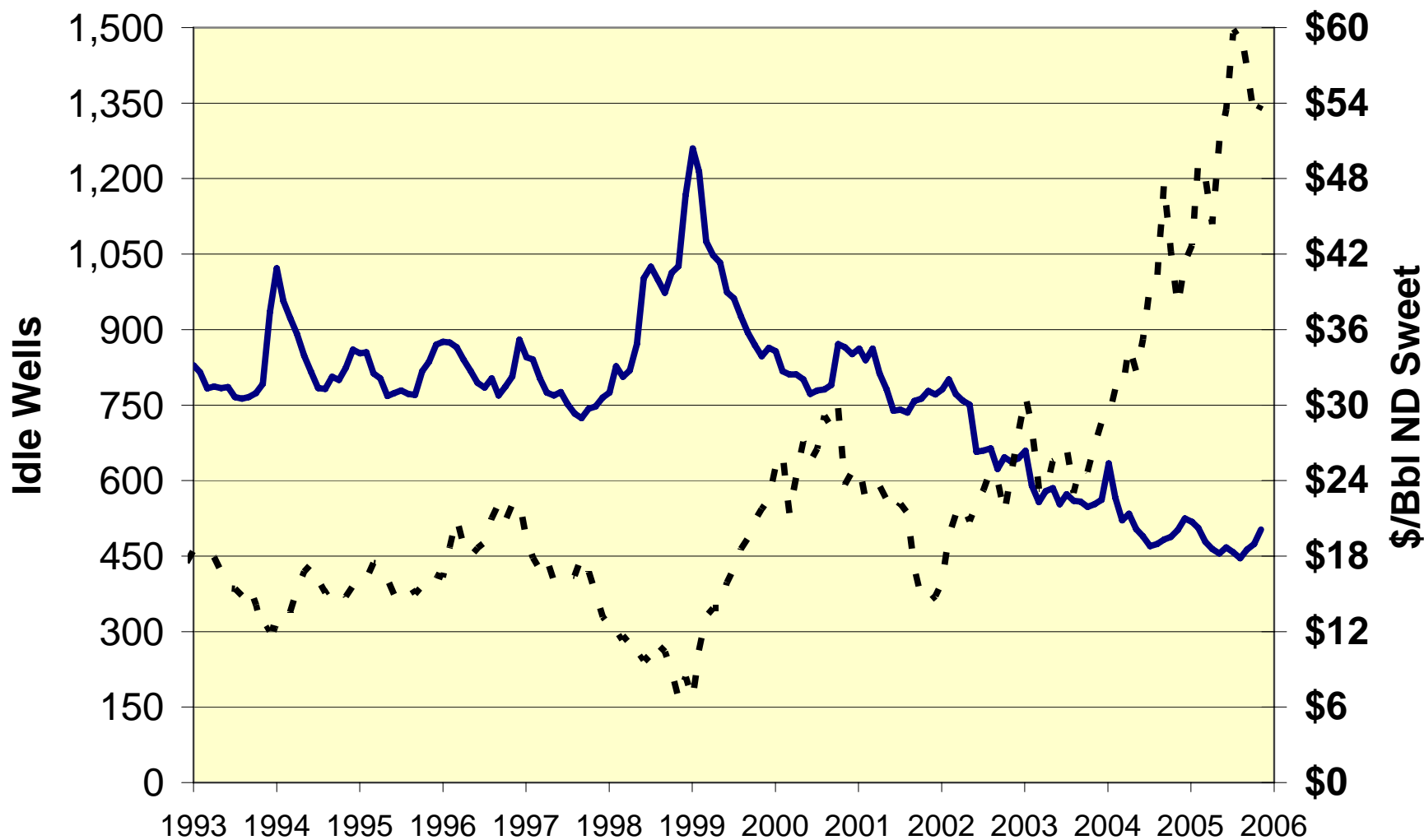


North Dakota Average Monthly Rig Count





North Dakota Idle Wells



What North Dakota can do

Increase the Minimum Quality on Enbridge Pipeline System in North Dakota

- + Reduces the incentive to truck heavy Canadian crude into North Dakota to blend with Williston Basin sweet and transport via North Dakota pipelines to eastern markets.
- + Requires more Williston Basin sweet to be added to blend with the heavy Canadian crude to meet the higher minimum gravity requirement
- Damage relations with Canadian producers and purchasers
- The amount of Canadian crude oil entering North Dakota has not been determined
- Some Bottineau and Renville County crude may not meet quality restrictions
- Need to be careful not to violate common carrier existing tariff or FERC regs

What North Dakota can do

Transport Crude Oil by Rail

- + Rail cars could serve as a short-term solution to move barrels into another market
- + 300 cars x 600 barrels each = 180,000 barrels potentially available with one railroad and more may become available
- + Round trip to Edmonton every 10 days = 18,000 barrels per day
- Refining capacity is in Edmonton, price unknown, heart of WCS crude production
- Transportation cost \$6-\$10 per barrel includes trucking
- Transporting crude by rail adds other logistical problems, is not the most efficient transport method, and does not appear to be a long-term solution

What North Dakota can do

Enbridge Pipeline Expansion

- + Enbridge customers strongly support the project
- + Higher operating pressure could add 8,000 barrels per day by mid year 2006
- + Additional horse power could add another 8,000 barrels per day by year end 2006
- + Additional pump stations could add up to 14,000 barrels per day by mid year 2007
- + Reversal of the Portal Link into Canada could add an additional 25,000 barrels of pipeline capacity out of the Williston Basin by mid year 2007
- + Transporting crude oil by pipeline is the most efficient and cost effective method getting the product to the marketplace
- Hydro test may not be successful and could slow or limit the expansion
- Reversal of the Portal Pipeline will be expensive and result in a higher freight charge since its farther to market
- Permitting delays could occur and the process of expansion takes time
- May create an opportunity for Canadian crude to fill the capacity expansion

What North Dakota can do

Access Keystone Pipeline Project

- + Capacity of 480,000 barrels per day with 350,000 committed leaving more than 100,000 barrels per day of capacity.
- + The Keystone Pipeline Project will traverse North Dakota on the Canadian side of the border and then pass north to south through eastern North Dakota
- + Expect permits to be filed with the North Dakota Public Service Commission in March 2006
- Designed to transport Western Canadian Sour (WCS) to US refining hubs
- This is a long-term project and will take several years to complete
- A significant amount of new pipeline would need to be installed to connect to the Keystone pipeline either in Canada or North Dakota

What North Dakota can do

Expand the Mandan Tesoro Refinery and build refined products pipeline

- + New capacity of 60,000-120,000 barrels per day for Williston Basin crude
- + EPA permit timeframe much shorter than for new refineries
- + Energy bill includes incentives for small-refinery expansions
- + Long term high salary jobs and property taxes for North Dakota
- + Creates a long-term market for North Dakota crude oil
- Current northern area refined products market is full with no growth
- Limited access to growing markets without new pipeline
- Major investment required, long distance to growing products markets with capacity
- Williston Basin reserves studies needed to address long term supply concerns

What North Dakota can do

Build New Refineries in Williston Basin Markets

- + New refining capacity for Williston Basin crude
- + Enhances the economy by adding more value to North Dakota oil
- + Adds new high skill high wage jobs in North Dakota
- Long permitting timeframes through EPA
- The Three Affiliated Tribes plan to use WCS in their proposed refinery
- Williston Basin reserves studies needed to address long term supply concerns
- Current northern area refined products market is full with no growth
- Refinery may only add to the problem without a new market

What North Dakota can do

Create a Pipeline Transportation Authority

- + The North Dakota Legislature could pass legislation in 2007 to authorize assistance with the transportation of crude oil, natural gas, or refined petroleum products
- + Wyoming has a Natural Gas Pipeline Authority, which is charged with promoting the development of all types of pipelines
- + Allows the state to engage in the process and lend support as needed
- Requires legislation and at the earliest would take until spring 2007 to become law
- May not achieve goals
- There are risks associated with capital invested and state bond ratings

What North Dakota can do

Apportion the Production of Crude in North Dakota/Montana

- + Protects correlative rights by making sure all wells are produced
- Reduction of Williston Basin crude oil transported to market may create a greater opportunity for Canadian crude to fill transportation
- Public hearings are required
- No assurance Montana will follow suit thereby just allowing more Montana oil to be transported
- The state of North Dakota calculates each wells allowable production according to published rules. The rules date to the early 1980s and do not address Enhance Oil Recovery units or other major changes in production

What North Dakota can do

Place a Tariff or Excise Tax on Canadian Crude Oil Entering North Dakota

- + Creates a disincentive for transporting heavy Canadian crude into North Dakota to be blended with North Dakota sweet
- + Generates revenues for North Dakota
- CAFTA, NAFTA and WTO filings very likely to result in litigation
- The amount of Canadian crude oil entering North Dakota has not been determined
- Common carriers such as pipelines are not allowed to discriminate
- We may determine North Dakota oil has better markets in Canada at some point in the future